

**Device for introducing an implant into a catheter**

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<http://web.nerac.com/access/WPRNDN1A?NDN=11301144500&C=04471800><http://web.nerac.com/access/WPRNDN1A?NDN=11301144500&C=04471800>**INVENTOR(S)**- INOUE KANJI 98-13, Miyazaki-cho Simogamo, Sakyō-ku Kyoto-shi.**PATENT ASSIGNEE(S)**- INOUE KANJI 98-13, Miyazaki-cho Simogamo.**PATENT ASSIGNEE(S)**- Kyoto-shi, Kyoto 606 **DESG. COUNTRIES**- CL, DE, ES, FR, GB, IT, LI**PATENT APPLICATION NUMBER**- 00107242.0**DATE FILED**- 1993-08-20**PUBLICATION NUMBER**- 01010405/EP-A3**PUBLICATION DATE**- 2000-06-21**ATTORNEY, AGENT, OR FIRM**- Grill, Matthias, Dipl.-Ing., Patentanwalt Tiedtke-Buhling- Kinne & Partner Bavariaring 4, 80336 München, DE**INTERNATIONAL PATENT CLASS**- A61F00206; A61M03100**PUBLICATION**- 2000-06-21, A3. Separate publication of search report; 2001-04-04**FILING LANGUAGE**- ENG**PROCEDURE LANGUAGE**- ENG**LANGUAGE**- ENG

This is a method of collapsing an artificial blood vessel A. The artificial blood vessel A comprises a pair of discrete end wire rings 101, 102, a tubular cover 7 made of a sheet of flexible, tensile material which connects the end wire rings 101, 102, and a plurality of intermediate wire rings 12 arranged spaced apart between the end wire rings 101, 102 and circumferentially fixed to the cover 7 by suturing or with adhesive. A plurality of dividing points 411, 431 which bisect the circumference of the front end wire ring 101 are pulled forward while the movement of the midpoints 421, 441 between the dividing points 411, 431 following the movement of the dividing points 411, 431 are restrained by the projections 18c on a tapered surface 18d of a funnelled tube 18 so as to fold the front end wire ring 101 into a wavy shape, with the dividing points 411, 431 forming forwardly directed peaks and the midpoints 421, 441 forming the bottoms of forwardly directed valleys, and the dividing points of the front wire ring are pulled farther forward so as to fold the intermediate wire rings 12 and the rear end wire ring 102 into a regular wavy shape having the same phase as that of the front wire ring 101 by the effect of restraint by the tapered surface 18d and the projections 18c, thereby to collapse the artificial blood vessel A as a whole into a small size.

**EXEMPLARY CLAIMS**- A device for introducing an appliance (A) to be implanted into a catheter (8), characterized by comprising an attachment (5) formed at the open end (8a) of said catheter (8) which is closed at its open end (8a) by a flexible check valve (55), and a cartridge (6) removably attached to said attachment (5) and having its front end portion (6a) communicating with said catheter (8) when the cartridge (6) is attached to the attachment (5) and its open end

(6b) closed by a flexible check valve (65); and that the check valve (65) of the cartridge (6) is pushed open to introduce the appliance (A) to be implanted into the cartridge (8), and with the check valve (6b) of the cartridge (6) kept nearly closed, the front end portion (6a) of the cartridge (6) is inserted into the catheter (8) by pushing open the check valve (55) of the attachment (5); The device for introducing the appliance to be implanted into the catheter, described in claim 1 and characterized by that the bore diameter ( $d_1$ ) of the attachment (5) of said catheter (8) is bigger than that ( $d_2$ ) of the open end (8a) of said catheter (8), and the front end portion (6a) of said cartridge (6) is smoothly connected to the open end (8a) of said catheter (8) through the attachment (5) of the catheter (8) with respect to bore diameter when the cartridge (6) is attached to the catheter (8).

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